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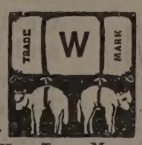

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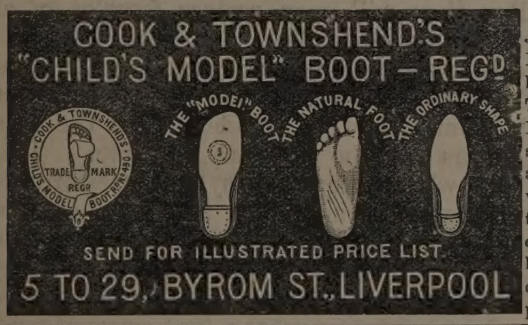
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HEALTH

A WEEKLY JOURNAL OF

DOMESTIC AND SANITARY SCIENCE.

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EDITED BY DR. ANDREW WILSON, F.R.S.E. &c.

VOL. V.—No. 126.] FRIDAY, SEPTEMBER 4, 1885. [PRICE TWOPENCE. *Registered at G.P.O. as a Newspaper.*

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HEALTH

EDITED BY

DR. ANDREW WILSON, F.R.S.E., &c.

LONDON: *FRIDAY, SEPTEMBER 4, 1885.*

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Notes by the Way

BY THE EDITOR.

"Health is the foundation of all our physical happiness."—*Herder.*

I HAVE received a communication respecting the alleged influence of tomatoes in producing cancer, referred to in this place in the last number of HEALTH. As I have promise of at least another letter on this topic, I reserve these communications till next week, so as to be enabled to lay the opinions of medical men on this subject before my readers.

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THE death of a boy from eating unripe fruit is reported from Perthshire. This is a danger to be specially guarded against. Cases of English cholera are not infrequently caused in this way; although a fatal result is more likely to be brought about by the distension or even rupture of the stomach, and consequent collapse. The account from which I quote adds that the medical testimony at the "inquest" was that death had resulted as above described. Apparently the journalist in question is oblivious to the fact that "coroners' inquests" are unknown in Scotland.

◆ ◆ ◆

THOSE of my readers who noted the articles on sleep-walking, which appeared in last year's HEALTH, will peruse the following account with interest:—A remarkable case of somnambulism is reported from Tramore, in the county of Waterford. A young man, evidently a tourist, engaged a room at the Railway Hotel there, and retired to rest. About three o'clock in the morning some night stragglers saw a man in his shirt holding a lighted candle raise a window on the second floor of the hotel, and deliberately lower himself from it, falling a depth of 14 ft. or 15 ft. The fall apparently did not affect him, and with the candle still lighted in his hand he walked into the town and knocked at a door. Here he returned to consciousness, and was provided with shoes, hat, and an old coat.

◆ ◆ ◆

SUCH a case is by no means unparalleled in the records of physiology. McNish, author of "The Physiology of Sleep," and other works, if I mistake not, relates a case in which a Highland lad, who was accustomed to ford a river every day on his way to his occupation of tending sheep, was seen to perform this feat while asleep, and returned to his bed all unconscious of his wanderings and of his aquatic adventure. Probably in this instance, the fact that the lad was daily accustomed to plunge into the river, accounted for his being unawakened by contact with the water.

◆ ◆ ◆

THERE is probably no more interesting occupation for a holiday than the practice of photography. In former years this remark might have been viewed in the light of an impossible recommendation. To-day, however, the amateur photographer is an "accomplished fact" of social life, and the efforts of some amateurs are admitted to equal the work of professed experts. But, without aiming at such high results, it is, I believe, open to everyone to attain, by the cultivation of patience and ordinary dexterity, a fair amount of success in this delightful art. I have, therefore, pleasure in directing attention to a most excellent little sixpenny manual entitled "How to become a successful amateur photographer," by W. J. Lancaster, F.C.S. By aid of this little work, written in a clear, non-technical style, any one may acquire the fundamental principles of the art. Every process is described, and all details rendered plain. The publishers are Messrs. J. Lancaster & Son, Birmingham, whose efforts to produce cheap and reliable apparatus for amateur photographers are so well known.

◆ ◆ ◆

ALL who are interested in the improvement of cookery will be pleased to hear that an "International Cookery and Food Exhibition" will be held at the Royal Aquarium, Westminster, London, in December next. The exhibition will include some 150 classes of exhibits, and gold, silver, and bronze medals, as well as money prizes, are to be awarded to successful competitors. Schedules and all information will be shortly issued. I understand the promotion of this most useful exhibition is due to the enterprise of Messrs. Bertram and Roberts, the well-known refreshment contractors. Such a "cookery exhibition"—which will no doubt be named the "Cookeries" or "Culinaries" in the ordinary evolution of society phraseology—will really form a true and appropriate adjunct to the Health Exhibition, and should interest all classes. I hope Messrs. Bertram & Roberts will institute a cookery competition for schoolgirls, and one for working men's wives as well.

◆ ◆ ◆

HERE is a useful hint for sufferers from cold in the head and allied troubles. M. Bourgarel tells us that a cold water douche applied to the feet has a valuable and remedial influence in all affections of the chest. Cold so applied produces a marked reaction in other parts of the body, and the physician just named advises that the cold douche to the feet should be systematically and regularly employed in all cases of colds. Hot foot baths for colds are, of course, commonly used; but it seems worth while to give the cold foot douche a trial. The remedy has the merit of simplicity, at least, and it also has the recommendation of physiology by way of further support.

◆ ◆ ◆

A CORRESPONDENT asks me to draw attention to the "Ladies' Sanitary Association" of her town, and I am pleased to be able to speak in terms of high commendation of the aims of this body. To Mrs. T. S. Hatton the credit of sustaining and directing the work of the association is due. I understand Mrs. Hatton has been labouring, not only in Wolverhampton, but in many other towns in the cause of sanitary science, and has been delivering lectures, gratuitously, in London, Liverpool, St. Helens, Lower Darwen, and elsewhere. The Association, stimulated by Mrs. Hatton's direction, has done good work in giving instruction in the more important branches of hygiene.

Nursing and the general care of children, domestic economy, and ambulance have been duly treated. The advantage of enlisting women's work in the cause of health cannot be too greatly esteemed. Mrs. Hatton, I observe, has retired from the more active exercise of her talents in Wolverhampton, that she may devote her time to the extension of sanitary knowledge elsewhere. None who know of her work will refuse to wish Mrs. Hatton a renewal of her success in the new spheres in which she may labour.

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Some time ago the subject of "human tails" was treated in Health. I observe that Fol, of Geneva, has placed on record some interesting observations on the tail-extremity of the human spine, especially in those earlier stages of man's development which precede birth. It is a fact that in the second month of life the tail, or *coccyx*, as it is called in human anatomy (and which in the adult consists usually of four small vertebræ), attains a high stage of development. But Professor Fol adds a new interest to the human tail by his remark that additional vertebræ (or joints of the backbone) are to be found in the early history of the human individual, these vertebræ disappearing as the full development is attained.

✣ ✣ ✣

Thus, in a very early embryo of man (about 25 days old), Fol found 32 vertebræ in the spine; the full number in adult life being 33, and occasionally 34. In a specimen a little older, 33 were found. Suspecting there might be a further increase in the number of these bones, he found in older embryos as many as 38 vertebræ. Comparing these with other specimens, Fol discovered that the latter number was perfectly normal, and not an example of extra-development. Later on in human life, it would seem, the extra-vertebræ tend to disappear. In a six-weeks'-old specimen, the 36th to the 38th vertebræ became fused into a single mass. In older embryos still, the last five vertebræ united to form the permanent 34th bone, which is not unusually found in the adult spine. These transitory bones, like the rudimentary ear-muscles and other structures of man, have a relation to his past development. Readers who may be interested in such topics will find an article of mine, published in *Longman's Magazine* of last year, a guide to the study of man's likenesses to lower life.

✣ ✣ ✣

I beg to call the attention of my readers to the offer of Messrs. Field, of the "Ozokerit Soap Works," Lambeth, London, S.E., announced in their advertisement which appeared in the last number of Health. Messrs. Field will send a sample tablet of their well-known Samphire Soap, during August and September, free to all applicants, who will cut out the illustration from the advertisement in question, and forward the same to them at Lambeth. This offer should be largely taken advantage of by our readers who may be desirous of testing practically the virtues of a soap which has received the high commendation of leading authorities, and which is in every respect a pure and excellent article.

Walnut Hair Oil.—Crush two ounces of fresh green walnut shells with a quarter of an ounce of powdered alum to a smooth paste; digest with ten ounces of benzoinated oil in a water-bath until all aqueous vapour has been driven off. Perfume with two drops of otto of roses and ten drops of oil of neroli. The walnut shells are best obtained about the end of August or beginning of September. They contain, besides an oil and other constituents, a substance resembling gallic acid, and impart a brown shade to the hair.

Original Essays

"Life is not to live, but to be well."—*Martial.*

FEEDING THE SICK.

By Dr. Andrew Wilson.

There is probably no subject of greater practical importance in the range of medical science than that of "feeding the sick." Healthy living naturally depends largely upon the proper selection of food, and upon its due and perfect assimilation—that is, its incorporation with the elements of our frames. But in the case of the sick, the question of food and feeding becomes greatly increased in its importance on account of the conditions with which the topic is environed. Thus there is, firstly, the question of the kind of food required by the sick person, and this again resolves itself into the question of his particular ailment. Certain dietaries, as is well known, are now relied upon by physicians for the treatment of special diseases. Of old, indeed, the influence of diet in the cure of the sick was recognised by Hippocrates, Galen, and other lights of medical science. It is matter of common knowledge that in such ailments as diabetes and scurvy the diet becomes the primary question in the treatment. Even in the case of milder ailments, ranging in their nature from a sick headache or a bilious attack, to indigestion or a slight fever, the foods which it is proper to give, and the diet which it is proper to withhold, are matters to which we pay especial attention.

It can readily be understood, therefore, that physicians have not neglected to study the subject of sick-dietaries. A recent utterance on the subject by Dr. W. Roberts, of Manchester, is well worthy of notice here, not only on account of the intrinsic importance of the subject, but because the author in question has attained a high reputation for his able treatment of all questions relating to the dietetic and general treatment of the sick.

Dr. Roberts himself speaks, in the first instance, of the high importance of the study of sick-dietaries. He goes the length of telling us that the topic has not received that amount of attention which it unquestionably deserves. "Dietetics," he tells us, "therefore, cover more ground than any other branch of the healing art; they are also, perhaps, the most ancient branch. Hippocrates traces back the very origin of medicine to dietetics. 'For,' he says, 'the art of medicine would not have been invented at first, nor would it have been made a subject of investigation, if, when men are indisposed, the same food, and other articles of regimen which they eat and drink when in good health, were proper for them, and if no others were preferable to these.' Notwithstanding this universal applicability, and this high antiquity, it must, I think, be allowed that dietetics, except in a few special cases, are somewhat neglected in these days. The often contradictory advice which is tendered to invalids in regard to their diet by the several medical men whom they may consult, betrays the want of a guiding principle, and of a general consensus of opinion in the medical profession on the subject of feeding the sick. This is, perhaps, not to be wondered at when it is considered how little systematic study is devoted to dietetics, and how fragmentary is the instruction on this subject which is given to the student of medicine. So far

McMullin's Electric Brushes have been awarded a *Gold Medal* at the Exposition at New Orleans. The extra-power Brushes were much appreciated and largely purchased in the United States, as were also the Horse Brushes by owners of valuable Horses, and for use on Ranches.—All particulars of Wm. Dingle, 15, Hindon-street, Eccleston-square, S.W.—[Advt.]

as I know, there is no systematic teaching of dietetics, even on the most limited scale, afforded to the student at any of our medical schools. He is left to pick up his knowledge of this subject as best he may, during the earlier years of his practice, and he often ends by taking his own digestive organs as his type, and prescribes for his patients according to the likings and dislikings of his own stomach. This is, I need hardly say, a very unsatisfactory proceeding, for there is, perhaps, no subject in which individual experience is so fallacious a guide as dietetics, and none in regard to which it is more important to draw our inductions from a wide basis of facts."

Equally earnest is our author in insisting upon our recognising the fact that a knowledge of the diet which is proper for disease, must be founded upon an understanding of what is necessary in the way of food for the preservation of health. Here, natural habits, so to speak, step in to guide the observer. Feeding is not a rule-of-thumb matter, or one which is liable to erratic variations. There is a certain generalised code of laws on which the food-habits of men, like those of lower animals, are founded. Such laws represent the outcome of long experience in deciding what is best, safest, and most necessary for any given race of animals. It is so with plants as well. Certain plants demand given minerals for food, in preference to others. The farmer has to avoid exhausting his soil by "rotating" his crops; a proceeding amounting to his recognising that while one kind of crop will select certain constituents of the soil for food, another species of plant will tend to choose other minerals. Indeed, botanists will inform us that in the case of some plants, there is exhibited a special partiality for certain minerals. Thus, certain members of the violet-tribe will not flourish unless zinc is present in the soil, and other plants are known to exhibit an equally peculiar taste and discrimination, as it were, in their selection of food-materials.

Dr. Roberts is therefore only expressing a wise law of life at large when he advises the study of the special and natural wants of healthy mankind in the way of food, as a preliminary to a knowledge of their demands in a diseased or unhealthy state. It is only by a study of this kind that the physician can acquire that power of wide generalization which becomes of such inestimable service in the treatment of disease. Similarly, it is only through such study on the part of the public that we may hope to avoid errors in food, or the unwholesome bigotry which leads many persons, from preconceived notions and instilled prejudice, to reject one food as bad, and to pin their faith to another kind of food as a kind of panacea for every ill.

Dr. Roberts' words may be quoted in this connection:—"I venture, therefore, to say that the science of dietetics must be mainly based and built up on an observation and a study of the practices and customs of mankind in regard to their eating and drinking, rather than on any *à priori* data supplied by physiology. In the case of the lower animals, we assume that each creature selects, from the nutrient materials within its reach, those articles which are most suited to its well-being, and are best fitted to promote its success in the struggle for existence, and that it is guided in this selection by an almost unerring instinct. This, like other instincts, is now explained by biologists as consisting essentially in an inherited experience, which has been gradually accumulated through a long line of ancestors, and is transmitted by heredity to the descendants. Accordingly, when we see an animal feeding on a particular kind of food, we conclude, without hesitation, that that food is, of all the nutrient materials accessible to it, the best adapted for the special wants of its economy. But we know that man, in regard to his bodily functions, is subject to the same laws as govern the life of the lower animals; and we cannot doubt that, in the formation of his dietetic habits, man is guided by the same kind of instincts as those which guide the rest of the animal creation in the choice of their food.

"The generalised food-customs of mankind are, therefore, not to be viewed as random practices adopted to please the palate, or to gratify an idle or vicious appetite. These customs must be regarded as the outcome of profound instincts, which correspond to important wants of the human economy. They are the fruit of a colossal experience accumulated by countless millions of men in successive generations. They have the same weight and significance as other kindred facts of natural history, and are fitted to yield to observation and study lessons of the highest scientific and practical value.

"In taking dietetic customs as objects of study, it is obvious that widely-disseminated customs, followed by many races and by vast masses of population, have a deeper and broader significance than customs limited to a few races or to small communities. It is also obvious that the practices of the more successful races, and of the easier classes of a nation, are more likely to yield good dietetic models than the practices of backward races or of the poorer classes; because the former, owing to their ampler means, have greater freedom of choice, and because also their greater success in the struggle for predominance is *prima-facie* evidence of the beneficial tendency of their food-habits. I need hardly say that dietetic customs which are not the outcome of the free choice of the population, but are the consequence of legislative enactments or of religious injunctions, are of no utility as guides in the study of dietetics—except, indeed, as warnings of the mischief that may accrue from ignorant meddling.

"The British races and the other races of Western Europe, together with their kindred and descendants in different parts of the globe, are, on the grounds just stated, fitted to supply us with a body of dietetic customs which may be regarded as a beneficial model. These races and nations are every way, but especially in intellectual power and in their productiveness of men of originality and eminence, far in advance of all others. Their food-customs have grown up spontaneously, without material interference from legislator or religious reformer. Their world-wide commerce has brought cheaply to their doors the products of every land and every clime, and has enabled them to exercise a greater freedom of selection than has been possible to any other races."

Among the Western nations the food consists of cereals,—that is, of corn, wheat, and like plants,—of leguminous vegetables, such as peas, beans, lentils, &c.; and of green vegetables and fruits; and of animal matters ranging from the flesh of the ordinary food-beasts, to that of fish and shell-fish. Alcohol is very generally consumed, and, as the author remarks, tea, coffee, and cocoa are widely-used beverages. These items, of course, constitute the dietary of the healthy individuals of the western nations. Mankind legislates in a food-sense never for the sick, but for those who are hale—not for the young but for the adult population.

Modifications of the dietetic rules, however, naturally become established among civilised races. Thus the diet for the young naturally becomes of importance, as also does the settlement of what is best for the very old. Differences of diet become noticeable, likewise, in the matter of sex.

To Inventors.—Inventions protected by Royal Letters Patent at lowest rates. Provisional protection for nine months, £2. For all information concerning Patents address Messrs. Lulman & Co., Patent Agents, 8, Essex-street, Strand, London, W.C.—[Advt.]

Dr. Roberts remarks that men eat a greater quantity of meat than women. He lays down the proportion of flesh consumed at two-thirds by men and one-third by females. With alcohol, it is the same. Four-fifths of the alcohol drunk is consumed by men. Hence arises a social and medical fact of extreme importance—namely, that which demonstrates that women, being less accustomed to alcohol, are susceptible to its effects more readily than men; are more readily injured by its use; and, it should be added, are much more difficult of reclamation as drunkards than are men. Conversely, tea and coffee are consumed in greater quantity by women than by men; and they consume more bread and milk than do the opposite sex.

Disinfectants.—Two pounds of copperas, or sulphate of iron, dissolved in a pail of water, will greatly assist in purifying a privy or cesspool. A pound of nitrate of lead dissolved in the same way is excellent for sinks, drains, or vaults. Chloride of lime is also effectual, or a layer of charcoal-dust will prevent offensive odours arising from any decomposing substance. The quantity of these substances will depend upon the amount of filth to be deodorised, and the length of time during which they will be effectual will depend upon local conditions.

Honey.—Nowadays all honey is extracted without heat by means of a machine constructed on the centrifugal system, the comb being uninjured. It is replaced in the hive, and in a few days, if the "flow" is good, it is again filled by the bees, ready for treatment. In this way the same comb will last, perhaps, for two seasons, when, if it is dark, dirty, or broken, it is melted and made into "foundation" by a machine devised for that purpose. This foundation is completed by the bees, which put on the finishing touches, and are thus relieved of all the heavy work, devoting their time purely to business "in making hay (*i.e.*, honey) while the sun shines." This, however, seems questionable economy, and hinges on which is the most valuable product of the bee—the wax or the honey.

Some Ancient Plagues.—The epidemics of Old London were typhus, synochus, plague, sweating-sickness, troupe galante (from France), small-pox, malignant sore throat, or scarlet-fever, and measles with mumps. The first of these very often followed on murrain of cattle, and famines from drought, and in times of wars and civil troubles. Synochus, of which plague was a form, prevailed in the summer and autumnal months. Its first visitation was from the East, as the Black Death in 1348, and there are no means of learning how many of its epidemics there were up to the last, in 1665, although it seems to have become as endemic in London as it was in Constantinople, into which it was taken by the Turks in 1346. Its last epidemic in London appears to have been as fatal as its first was; and the next year the Great Fire destroyed the City, and then it flickered out by a few cases a year. If its endemicity was owing to want of precautions, its epidemicity was determined or not by introduction from abroad, and prolonged by the measures wrongly had recourse to for its checking. In the seventeenth century alone it destroyed 186,401, giving a ratio of 215·7 per thousand to all deaths; and there were four great epidemic years—1603, 1627, 1636, and 1665—that carried off 145,000 badly recorded, and believed to have been nearer 200,000. Before Sydenham made it, there was no attempt to classify the fevers of London, nor to give them any distinct or consistent nomenclature, and their etiology had never been scientifically considered. He attributed them in general either to a commotion, an ebullition, or an inflammation or a fermentation of the blood.

Personal Health

"Be timely wise;
With health all taste of pleasure flies."—*Gay.*

THE REMEDIES OF NATURE.

By Felix L. Oswald, M.D.

SECOND PAPER.

The summer season, however, brings relief. In the sweltering summer nights of our large seaboard towns the outcry of instinct generally prevails against all arguments of superstition; parents know that their boys would desert and sleep in a ditch rather than endure the horrors of an air-tight sweat-box; so the windows are partially opened. The long, warm days also offer increased opportunities for out-door rambles. In midsummer, therefore, Nature rallies once more. But not always. There are people whose prejudices can not be shaken by experience, and in their households a perennial system of air-poisoning overcomes the redeeming tendencies of out-door life, as the subtle mixtures of La Brinvilliers overcame the iron constitution of her last husband. Their children snuffle the year round; no cough-medicine avails, no flannels and wrappers, even in the dog-days, and the evil is ascribed to "dampness," when the cold-air theory becomes at last too evidently preposterous.

To an unprejudiced observer, though, that theory is equally untenable in the coldest month of the year. No man can freeze himself into a catarrh. In cold weather the hospitals of our northern cities sometimes receive patients with both feet and both hands frozen, with frost-bitten ears and frost-sore eyes, but without a trace of a catarrhal affection. Duck-hunters may wade all day in a frozen swamp without affecting the functions of their respiratory organs. Ice-cutters not rarely come in for an involuntary plunge-bath, and are obliged to let their clothes dry on their backs: it may result in a bowel-complaint, but no catarrh. Prolonged exposure to a cold storm may in rare cases induce a true pleural fever—a very troublesome affection, but as different from a "cold" as a headache from a toothache—the upper air-passages remain unaffected. Sudden transition from heat to cold does not change the result.

In winter the "pullers" of a rolling-mill have often to pass ten times an hour from the immediate neighbourhood of a furnace to the chill draught of the open air; their skin becomes as rough as an armadillo's, their hair becomes grizzly or lead-coloured; but no catarrh. On my last visit to Mexico, I ascended the peak of Orizaba from the south side, and reached the crater bathed in perspiration; and, following the guide across to the north-west slope, we were for ten minutes exposed to an ice-storm that swept the summit in blasts of fitful fury. Two of my companions, a boy of sixteen and an old army-surgeon, were not used to mountain-climbing, and could hardly walk when we got back to our camp in the foot-hills, but our lungs were none the worse for the adventure. Dr. Franklin, who, like Bacon and Goethe, had the gift of anticipative intuitions, seems to have suspected the mistake of the cold-air fallacy. "I shall not attempt to explain," says he, "why damp clothes

Scott's Midlothian Oat-Flour.—There is no preparation which can be assimilated with greater facility than such a flour as this. Those who suffer from indigestion might substitute for their ordinary breakfast materials this flour, prepared according to the recipe given by Messrs. Scott and printed on the tins.—Ed. Health.—[Advt.]

occasion colds, rather than wet ones, because I doubt the fact; I believe that neither the one nor the other contributes to this effect, and that the causes of colds are totally independent of wet and even of cold" ("Miscellaneous Works," p. 216).

"I have, upon the approach of *colder* weather, removed my under garments," says Dr. Page, "and have then attended to my out-door affairs, minus the overcoat habitually worn; I have slept in winter in a current blowing directly about my head and shoulders; upon going to bed, I have sat in a strong current, *entirely nude*, for a quarter of an hour, on a very cold, damp night, in the fall of the year. These and similar experiments I have made repeatedly, and have never been able to catch cold. I became cold, sometimes quite cold, and became warm again, that is all" ("Natural Cure," p. 40).

There are many ways, less often sought than found, for "becoming quite cold, and warm again," but an experimenter, trying to contract a catarrh in that way, would soon give it up as a futile enterprise; after two or three attempts he would find the attainment of his purpose more hopeless than before; he would find that, instead of impairing, he had improved the functional vigour of his breathing-apparatus. Cold is a tonic that invigorates the respiratory organs when all other stimulants fail, and, combined with arm-exercise and certain dietetic alteratives, fresh, cold air is the best remedy for all the disorders of the lungs and upper air-passages. As soon as oppression of the chest, obstruction of the nasal ducts, and unusual lassitude indicate that a "cold has been taken"—in other words, that an air-poison has fastened upon the bronchi—its influence should at once be counteracted by the purest and coldest air available, and the patient should not stop to weigh the costs of a day's furlough against the danger of a chronic catarrh.

In case imperative duties should interfere, the enemy must be met after dark, by devoting the first half of the night to an out-door campaign, and the second half to an encampment before a wide-open window. If the fight is to be short and decisive, the resources of the adversary must be diminished by a strict fast. Denutrition, or the temporary abstinence from food, is the most effective, and at the same time the safest, method for eliminating the morbid elements of the system; and there is little doubt that the proximate cause of a catarrh consists in the action of some microscopic parasite that develops its germs while the resistive power of the respiratory organs is diminished by the influence of impure air. Cold air arrests that development by direct paralysis.

Towards the end of the year a damp, sultry day—the catarrh-weather *par excellence*—is sometimes followed by a sudden frost, and at such times I have often found that a six hours' inhalation of pure, cold night-air will free the obstructed air-passages so effectually that on the following morning hardly a slight huskiness of the voice suggests the narrowness of the escape from a two weeks' respiratory misery. But, aided by exercise, out-door air of any temperature will accomplish the same effect. In two days a resolute pedestrian can *walk away* from a summer catarrh of that malignant type that is apt to defy half-open windows. But the specific of the movement-cure is *arm-exercise*—dumb-bell swinging, grapple-swing practice, and wood-chopping. On a cold morning (for, after all, there are ten winter catarrhs to one in summer), a wood-shed *matinée* seems to reach the seat of the disease by an air-line. As the chest begins to heave under the stimulus of the exercise, respiration becomes freer as it becomes deeper and fuller, expectoration ceases to be painful, and the mucus is at last discharged *en masse*, as if the system had only waited for that amount of encouragement to rid itself of the incubus. A catarrh can thus be broken up in a single day. For the next half-week the diet should be frugal and cooling. Fruit, light bread, and a little cold, sweet milk, is the best catarrh diet.

A fast-day, though, is still better. Fasting effects in a perfectly safe way what the old-school practitioners tried to accomplish by bleeding; it reduces the semi-febrile condition which accompanies every severe cold. There is no doubt that by exercise alone a catarrh can gradually be "worked off." But in-doors it is apt to be steep up-hill work, while cold air—even before the season of actual frosts—acts upon pulmonary disorders as it does upon malarial fevers: it reduces them to a less malignant type.

The Permanent Exhibition, Registry, and Agency of Approved Architectural Appliances and Inventions.—Examples on view of perfect Sanitation, Ventilation of Drainage, Disconnection of House-drains from Sewer, Spray, and other Baths, Stoves, Wall-hangings and Decorations, Tile-work, Locks, Furniture, and various descriptions of House-fittings. Admission Free.—Stephen S. Phillips, Manager, 10, Baker-street, Portman-square, London, W. —[Advt.]

THE ESCAPE OF DRUNKARDS FROM INJURY.

One sometimes sees a drunken man pitched violently from a horse, and when the bystanders rush to the spot, expecting to find him dead, they are astonished to discover that he has been little injured. In his "Scrambles among the High Alps" Leslie Stephen tells the story of a guide who, while drunk, fell over a precipice so deep that a fall over it seemed almost certain death, and who yet sustained little injury. Stephen accordingly gives his readers the advice either not to fall over a precipice or to get thoroughly drunk before doing so. I myself once saw a man who had thrown himself, while drunk, over the Dean Bridge in Edinburgh, a height of about 200 ft., on to the rocky bed of the stream below. A sober man would probably have been instantly killed, but this individual, though he had broken both of his thigh bones, quickly recovered; and I saw him a few weeks afterwards hopping briskly about on crutches, the legs being nearly, though not entirely well. The reason of this immunity probably is that the nerve centres which regulate the heart and vessels are so much paralysed in the drunken man as not to be affected by the shock of the fall, which in a sober man would have acted on them so violently as to stop the heart, arrest the circulation, and cause instant death.—*Dr. Brunton in the "Book of Health."*

"Pa," said Johnny, at Barnum's circus, the other day, "if one of those Arabs should fall down and knock out all of his teeth, would he talk gum Arabic?"

Logwood Claret.—A correspondent suggests how to detect it:—Open a bottle of claret, then fill up a large glass full of water. Insert a finger in the mouth of the bottle, then immerse the finger and the mouth of the bottle in the glass of water, then withdraw the finger carefully, and, if the water in glass takes a red colour at bottom of the glass, the wine is artificially coloured; whereas, if the red colour will stay at top of glass, the wine is pure. Explanation:—The colouring being heavier than the water, sinks to the bottom, whereas if the wine is pure it will not discolour the water at the bottom of the glass. Colouring from any chemical will operate the same way. Light wines, such as claret or any wines that contain less than 18 per cent. of natural alcohol, should be laid down on the sides, and not be exposed to the rays of the sun.—*Grocers Advocate.*

Healthy Houses

"A happy home must be a healthy home."—*Anon.*

AN INQUIRY INTO WORKSHOP SANITATION.

By a Mechanic.

The following account, extracted from the *Pall Mall Gazette*, is well worthy of reproduction, as a contribution to the literature of an all-important sanitary subject:—

Just a year ago there appeared in the *Pall Mall Gazette* a letter calling attention to the defective sanitation in engineers' workshops. Arising out of that letter, an inquiry has been made by means of a printed list of questions on sanitary matters, circulated among mechanics through the agency of the branch secretaries of the Amalgamated Society of Engineers. The questions embraced the water-supply, the cleanliness of the shop, closet accommodation, condition of working as to warmth, draughts, &c., sanitary and factory inspectors' visits, and cases of sickness traceable to defective sanitation. Five thousand of these forms were sent out, in the proportion of one to every ten members of every branch of the Amalgamated Society in the three kingdoms, and the return postage paid in every case. Owing, however, to the extreme suspicion that workmen have that their employers may get hold of their names when concerned in a matter of this kind, and make them suffer for giving information, and to the supineness and indifference of many more, only 136 replies have been received. Ireland sent only one reply, and all Scotland only nine. The remaining 126 were pretty evenly distributed over the trade centres of England and Wales. They have been roughly classed as good, moderately bad, and very bad. Those workshops classed good are returned as employing 6,500 men, those classed moderately bad as employing 15,000 men, and the very bad as employing 7,500 men, in round numbers.

Water-supply.—Taking the order of the circular, the water-supply comes first. In most of the shops described this is the ordinary town's supply, by tap in the shop. A few are supplied by pump or well, these being all returned as either impure or scanty. A good many have buckets in the shop—a most defective plan. One ironworks in Staffordshire is supplied by a pump which goes dry for weeks together in summer. The Great Western Railway works at Worcester, employing about 270 men, are supplied by a can from the nearest house, and this supply is returned as very insufficient. One works in Lancashire, with forty men, has no water-supply at all, and the solitary Irish return of a shop in Belfast with 100 men has also none. A large works in Shropshire is in the same condition. Another works with 500 men is supplied by a tap in the water-closet. These are some of the worst cases, but, taking the returns as a whole, the water-supply is fairly good.

Cleanliness or otherwise.—The next set of questions relates to cleanliness and closets. The greater number of shops are described as clean; the worst one is at Derby, where 400 men are employed. It is described as "very dirty, and has not been lime-washed for nine years." There is one in Southwark that does not appear to have been lime-washed for ninety years, if one may judge from the blackness of the walls and the deposits of dirt and soot on the rafters. There is a tradition among mechanics that non-textile factories should be lime-washed once a year, in accordance with the law; but it is a tradition only.

Earth Closets.—For the purposes of this inquiry, the closets were divided into earth closets, water-closets, and open cesspools, but in a few cases the answers are mixed up among all three, and are unintelligible. It is in this particular branch of inquiry that the worst defects are found. Taking the earth closets, eighteen in all, the best one is at Sheffield, for 600 men. It has a good supply of dry earth, and is emptied daily; while it is twenty yards from a workshop. One of the worst is at Derby, for 487 men and boys; it is close to a shop, has no earth supply, and "is emptied only when it can hold no more." Between these extremes are all shades of bad and good—as at Elswick Ordnance Works, with some 3,000 men, the closets have had "no dry earth for years," but are emptied twice per week; while at some works they use flue dust, ashes, or sawdust as deodorisers, at others nothing at all; and the times of emptying vary from once a day to once a year.

Water Closets.—There are some sixty water-closets described, of every grade of badness and goodness. The best are in Leeds, Sheffield, and Nottingham, there being a surprising unanimity about these places being good in this respect. The Government places are good, as is the Great Northern Railway at Doncaster—altogether about thirty good closets flushed from once to five or six times per day. The very good closets are, however, in small shops of from three to fourteen hands. There are many at Liverpool flushed twice a day by the tide, and others in Yorkshire and Wales are placed over brooks and rivers—a filthy practice, that would be revolting even to the Metropolitan Board of Works. Among the thirty more or less bad water-closets some have no water, in others the apparatus will not work, some are flushed once a week by buckets of water, some depend on small streams which dry up in summer, and the flushing has to wait for the next rain. But by far the worst kind of closet is the open cesspool. There is every conceivable variety of this atrocious arrangement, from a semi-rotten scaffold-pole lashed to two upright stakes in the open air, to deep vaults that could be cleared only by turning a river through them. There are twenty-five open cesspools described, and as an open cesspool is bad *per se*, these need no classification; but a few examples may be given. There is one owned by the Great Western Railway at Worcester for 270 men, that is emptied once in two years. This is beaten by the London and North-Western at Newton-le-Willows, with three closets, one with 38 seats, another with 8, and another with 6, serving 950 men, and emptied once in two years. These are fifteen yards from a workshop. At Ramsbottom, in Lancashire, there is a works employing 70 men. The closet is an open cesspool in an old wooden hut in the yard; the seat is a long, narrow board, and when the pits get full they nail on another board to raise the seat up. The deponent says:—"I have seen four boards nailed on, one above the other, for this purpose." These boards would serve to fix the date of events as well. Here is one from Birmingham, a gilt-jeweller and die-sinker's shop. The closet has a "mixen," or midden, to it, and there are women employed in the shop. The shop-floor is so rotten that the heels of persons walking across it occasionally go

Buchan's Patent Prize Medal I.C. Exhaust Ventilators. The best in the market. Illustrated Price Lists free from W. P. Buchan, S.E., 21, Renfrew-street, Glasgow.—[Advt.]

An Important Health Tract.—A Short Catechism on the Cholera, by Dr. Thomas J. Hutchinson, reprinted from Health, and adapted for distribution by Health Societies, City Missionaries, and all interested in the diffusion of health-knowledge among the masses. Ten copies for 9d.; 20 for 1s. 3d.; 50 for 2s. 6d.; and 100 for 4s., post-free, to be obtained from the Publisher, Health Office, 74, Great Queen-street, W.C.—[Advt.]

through. In this category one is sorry to find the works of such a man as Sir Joseph Whitworth, at Manchester, with a cesspool in the middle of his works. Over the cesspool are "36 rails," and it serves for over 1,000 men. It is emptied "every Whitweek," and the stench is mildly said to be "abominable." There is a clerk to take each man's number on entering and leaving. There are closets on the pan system, others connected to ashpits, and one works in Wales has none at all. Altogether it is rather a dismal record for this year of grace.

What should be done.—No one can ask for workmen's closets to be made comfortable, because when the men get leg-weary they will go there as the only place where they are allowed to sit down for a few minutes; while other men, notably politicians, go to talk, as is very naively put in one of these returns—"The closet is divided into stalls, but as the men sit they can talk to the next occupant with the utmost ease and secrecy." But the closets should be made wholesome, they should flush automatically and frequently, and they should be well removed from a workshop. The open cesspool should be summarily abolished, and where water-closets cannot be had good dry earth-closets should be enforced. There are some works where the boilers are fed by water from the town sewers, and the same stuff is supplied in the foundry to cool the castings. Several strikes have occurred through this filthy practice in South Staffordshire, but it was in use quite recently. Some samples of this feed water were sent with the returns. They are average sewage. In very few closets is privacy possible—in one it is said to be "with caution."

Inspection.—Very few workshops are warmed in winter, many are draughty, and a large proportion have no facilities for warming or cooking food. As to sanitary inspectors' visits, in 109 out of the 136 papers the men have never seen or heard of such things—only twenty-seven have seen them. To the question about factory inspectors' visits, seventy-three reply in the affirmative and sixty-three in the negative. It is a popular belief among mechanics that factory inspection is a farce. The question about medical officers' visits has been almost invariably misunderstood as relating to any visit from a medical man. Very few know of any cases of disease traceable to sanitary defects. These speak of asthma, rheumatism, and colds in draughty shops, and of low fever where the closet ventilates into the shop, and one of poisoning from a polluted well in Lancashire.

It is a common mistake of workmen to estimate the number of men in a works too high, and in this respect the returns are probably not very accurate. Accuracy could only be attained by appealing to the books of the firm. The returns relate to only a small proportion of the workshops in the engineering trade, and perhaps they are not a fair average. The worst places may possibly not be returned, partly because the men who would put up with such places may be on a level with their conditions and partly because there might be a greater fear of the consequences of describing a bad place than of describing a good one. This seems borne out by the fact that Leeds, Sheffield, and Nottingham are well represented, and the returns are nearly all good; while only a very few are from Lancashire, and they are among the worst. All the returns except four bear the names and addresses of the men who have filled them up, and, taken altogether, they point to a large field for useful work by sanitary authorities.

A contemporary states that a few handfuls of common salt thrown daily into closets, and an occasional handful into slop-pails, wash-basins, &c., goes far towards counteracting the noxious effects of the omnipresent sewer-gas.

BREAK THE BOTTLES.

Another risk to life is added by the "second-hand bottle" or phial. Everybody knows the number of fatal "accidents" due to taking the wrong medicine or mixture at home from the innocent-looking bottle from the apothecary's. The largely-increasing use of bottled waters and other beverages points another warning against the unwashed bottle itself. The death of ex-Secretary Frelinghuysen seems to have been hastened, if not directly caused, by the same sort of carelessness that made it possible for a young child in this city, last week, to drink some deadly stuff out of a bottle found in a dust-heap. A much stronger word than carelessness, indeed, might be used to express this lack of conscience in the small daily affairs of life that furnishes kindred instances of "involuntary manslaughter." There should be as much care employed in destroying bottles that have had poison in them as there is expected to be in keeping poison or gunpowder or dynamite away from reckless handling. It does not always serve the same purpose to empty the bottles. Corrosive sublimate, carbolic acid, copperas, used in house-cleaning, are often put in old beer or apollinaris bottles. Aconite, which is used allopathically in a liniment, was found in the bottle of aërated water which was opened for the late Secretary of State, and of which he partook. Probably some careless previous owner had used a bottle to hold that lotion, and had allowed it to be gathered up and sold afterward, instead of destroying it. Ale, beer, and the bottled waters are usually sold with the proviso that the bottles will be paid for when returned. It is likely that many such are carelessly rinsed before refilling, with the understanding that only the harmless beverages have been in them.

It is causing great risks for somebody when potash is put into spruce-beer bottles, or fishberry into the soda-water bottle. Such receptacles being of stoneware or dark glass, it is next to impossible to see if they are quite clean and free from sediment when they are returned to the bottlers. As for furniture-polish, shoe-polish, and all such mixtures not sold as poisons, but as harmless articles, it is considerate to break the bottles before they are put into the ash-barrels, and then you are sure that any remnant left in them is very much less likely to do harm.—*Philadelphia Ledger.*

The important element of absinthe is a bitter principle, *absinthine*, and a volatile essential oil. The former gives to absinthe its medicinal value, but the oil is different from other essences in its tendency to produce drunkenness marked by epileptiform attacks.

The Chinese Tallow Tree.—The high price of tallow of animal origin has caused the attention of soap and candle manufacturers to be turned towards vegetable fats and their origin. The tallow tree is a native of China. It produces a fruit, which has a kernel covered with a thick layer of tallow, and contains a yellowish aromatic oil, useful for heating purposes. After the fruit has been gathered, which operation is effected in South China during the month of July, and in Northern China in October, hot water is poured over it. When the water has cooled, the tallow can be taken off, as it forms a layer upon the surface. It is then carefully melted and run into moulds made of bamboo cane, and is ready for the market. So, as our readers see, the operations are simple and expeditious enough. As to the product, it has a green colour, it is crystalline in structure, melts at 40 deg., and possesses a characteristic odour which is not disagreeable.

Public Health

"Health is the first Wealth."—*Emerson.*

OUR AMBULANCE LECTURES:

What to do in Emergencies and Accidents before the Doctor comes.

By Various Writers.

No. XXIV.—BANDAGING.

By J. Maxwell Ross, M.A., M.B., F.R.C.S.E.

Bandages are used to keep dressings in position, to give support to parts that are weak after accidents or otherwise, to keep muscles at rest, and in some instances to make compression over bleeding points or parts that are swollen. The application of a bandage to a swollen limb may, however, require much caution, and, as a rule, is not to be made without medical advice and supervision.

There are three different kinds of bandages—the *Roller*, the *Triangular*, and the *Special*. These vary partly as to their form, partly as to their mode of application, and partly also as to the material of which they are made. Roller and triangular bandages are made of unbleached cotton, linen, flannel, &c. In an emergency they may be readily made from strips of old sheeting. The special bandages are usually made of some particular material, such as indiarubber, elastic webbing, or plain webbing, and have special applications.

The roller bandage is the one most commonly used by surgeons. Its skilful application requires some practice. It consists of one or other of the materials already mentioned. These are torn into strips of various lengths and widths, and *rolled* up before being used. It is from this circumstance that the bandage receives its name. The lengths and widths vary according as the bandage is required for different parts. A glance at the table will explain.

	Width.	Length.
Finger bandages	½ to ¾ in.	1 yd.
Arm „	2 „ 2½ „	3 to 6 yds.
Leg „	2½ „ 3 „	6 „ 10 „
Chest „	4 „ 6 „	8 „ 12 „
Head „	1½ „ 2½ „	4 „ 6 „

These measurements are not to be taken as absolute, but approximate. Bandages are sometimes known by numbers, which express their widths, and tell how many have been made out of a piece of cloth measuring one yard, or 36 in. across. Thus No. 16 would signify a bandage 2¼ in. in

Fig. 1.—Single Roller.

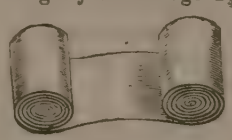

Fig. 2.—Double Roller.

width, sixteen such being made out of one yard; No. 12, a bandage 3 in. in width; No. 8, one 4½ in. in width; and so on. The straps being torn, the next thing is to have them rolled up. No bandage is likely to be put on neatly and with comfort unless it be first well rolled. In many hospitals it is the custom to do this by means of small machines, made for the purpose; but it can also be done very well by the hand. There will be a slight difference in the mode of procedure according as a single (Fig. 1) or double (Fig 2) roller is required.

In the former case one end of the bandage is taken and folded over and over until a small roll is made. This may be facilitated by using a match, a knitting-wire, or similar article to start upon. The bandage is then taken with the roll between the hands, the unrolled portion uppermost, as in Fig. 3. The thumbs are placed on the top of the

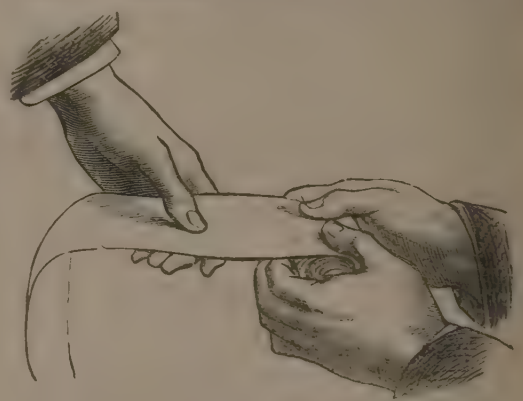

Fig. 3.—Showing the method of rolling a bandage between the hands.

roll, and a friend or assistant asked to pull upon the strip and pay it out slowly, as required. By an alternate movement of the hands the roll is made to turn round and round on itself, and the bandage is thus gradually wound up. If properly held by the assistant it presents a compact appearance, and can be more easily applied than if it were in a soft, bulgy mass, as it too often is. If the aid of a second person cannot be had then the roll may be taken between the finger and thumb of the right hand, and pulled upon by the left, as shown in Fig 4. Still another

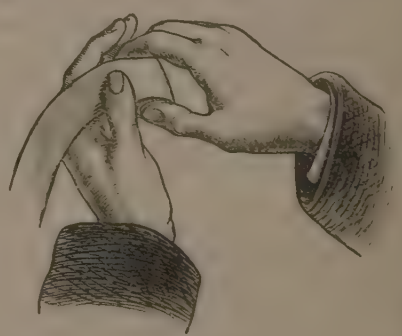

Fig. 4.—Method of rolling a bandage without aid from an assistant.

method of doing it without aid is to lay the roll on a table with the unrolled portion underneath. It can then be stretched by the left hand while it is being rolled by the palm of the right. A double roller (Fig. 2) is made in a very similar manner, with the exception that the centre or some other fixed point in the strip is first marked out. The bandage is then rolled from each end towards that point.

Having got our bandages ready for use, how are we to put them on? The conformation of the body renders their applications somewhat varied, though not so much so as might at first sight appear; but there are a few rules or

Sanitary Inspections.—Fee for Survey and Report, in London 2 Guineas. Estimate given and Improvement Works carried out when required.—The Sanitary Engineering Co., 115, Victoria-street, Westminster, S.W.—[Advt.]

principles which govern the application of every roller bandage. We shall consider these first.

The operator must place himself in a convenient position. Usually this will be in front of the patient, who, as he may find the process a tedious one, should be either sitting or lying down. The bandage must then be taken in either hand, a little of it unrolled, and the free end grasped by the fingers of the opposite hand. I say either hand, because a bandager should be ambidextrous, and it is quite an easy matter even for those who are not naturally ambidextrous to learn to bandage with either hand. The bandage is then to be applied with its outer side next the skin. The roller may thus be made to lie closer, and to look neater than if it were put on in the contrary way. A glance at Figs. 8, 12, 15, 16 (to appear in succeeding papers), which show the roller held in the hand, will explain what is meant. The whole width of the bandage must be made to lie close to the skin, and no part of the skin, except in special circumstances, should be left uncovered (Fig. 7). Where the whole width does not lie close, "pockets" are formed; the bandage is thus easily ruffled and loosened, and becomes very uncomfortable. In the case of a limb the bandaging must be begun from below—that is, from the hand or foot, and carried upwards. It should also be begun from the inner side (Figs. 5 and 8). This is not absolutely essential, but it adds greatly to the neatness of the bandage to do so, and the "reverses," which will be explained further on, look better when made to lie to the outer side. It is for this reason that those who desire to excel, should learn to bandage with either hand.

Lastly, the bandage must not be either too tight or too loose, but must make equal and uniform pressure in all parts. Over-tightness in bandaging has more than once cost a patient his limb, and even his life. When finished it should be fixed by a pin put in parallel to the width, or by a stitch, and not by the slovenly method of tearing the end in two strips, which are carried round the limb on opposite sides and knotted.

The beauty of morocco leather may be quite restored by varnishing with the white of an egg.

Silver Soap.—The following are among the many preparations used:—Mix half-a-pound of jeweller's rouge with three-quarters of a pound of prepared chalk. Or, a quarter of a pound of levigated putty powder, half-a-pound of burnt hartshorn, one pound of prepared chalk, and one ounce of rose pink. Or, half-a-pound of fine chalk, three ounces of pipe-clay, two ounces of white lead, threequarter-ounces of magnesia (carbonate), and the same quantity of jeweller's rouge.—*Independent Journal.*

Toughened Glass.—Mr. R. J. Friswell communicates to the Chemical Society the experience of eleven months in the use of twenty beakers of toughened glass. They did not stand boiling over the flame of a rose-burner when supported on wire gauze, nor the application of strong sulphuric acid, which produced exfoliation. Some which had been used for collecting tarry distillates exhibited a number of very minute fissures, which in several cases was followed by fracture. The result of eleven months' use may thus be summarised:—Of twenty beakers, two burst spontaneously, =10 per cent.; one burst on hot water being poured in, =5 per cent.; six were useless from fissures and exfoliation, =30 per cent.; eight are in good condition, =40 per cent.; three have been broken by unknown means, =15 per cent. Taking into consideration the loss of confidence caused by the high percentage of spontaneous bursting, it may be said that toughened glass is a complete failure in the laboratory.

Jottings from the Journals.

"Th' ingredients of health and long life are
Great temperance, open air,
Easy labour, little care."—*Sir Phillip Sydney.*

Feeding-Bottles and Diarrhœa.—The authorities of Exeter have been justifiably alarmed by the fact of a large increase in the infant-mortality of that city. From the measures which have been taken to check it, the combination of unwholesome housing arrangements with a milk-diet has here apparently, as in other cities, been followed by their baneful sequel, summer diarrhœa. Much discussion has arisen respecting the etiology of this disorder. Subsoil-water, drain-impurities, bad ventilation, in short all the producers of a foul and germ-laden atmosphere, have been brought to bar. Fortunately, the medium by which these chiefly act upon the child has escaped recognition. It has been pretty clearly established that the means of transit for the seeds of disease is in most cases the milk of the feeding-bottle. Among those who rear their children at the breast, and among the well-to-do, whose nursery-management is carefully and cleanly conducted, the severer forms of infantile diarrhœa are uncommon. Among the overcrowded poor, living in close tenements and in basement-rooms, they are both common and notoriously intractable. In such cases, the cause is almost certainly found to be a bottle, long in use perhaps, imperfectly and irregularly cleansed, and supplied with diluted milk, which, even if sweet when mixed, becomes sour as soon as it enters the acid receptacle. All measures intended to arrest the consequent disease are doomed to failure, unless the greatest care be taken to remedy the primary evil. Where breast-milk cannot be had, though it is of course preferable to any other, the feeding-bottle becomes necessary. Should this be so, two bottles at least ought always to be at hand, in order that each may be used alternately, and may, during the interval of disuse, be thoroughly cleansed with all its appurtenances, in soda or other alkaline solution, and then left to soak in pure water till again required. It is also necessary that the milk should not lie in the bottle longer than two hours, otherwise putrefactive changes may be looked for. A frequent error with some nurses is to keep the cows' milk, if such be used, through the night, and uncovered, in a bedroom containing not the purest air. In any such case, the milk should be kept outside of the room in a vessel covered with a wet cloth, and if possible surrounded with ice. Another error is to dilute the milk too sparingly with water. It should be remembered that the milk of cows is, in general terms, twice or three times as strong in solid constituents as that of the human breast, and dilution must be sufficient to equalise the difference. It is safest to boil the water before mixing with the milk, and, under certain conditions, especially in hot weather, to boil the latter also. Swiss condensed milk, after holding its place so long in the market, can hardly be expected to have escaped adulteration. There is little doubt that it varies in quality as in price. We cannot in the circumstances too strongly urge the maxim, doubly true in such a case as this, that to buy the best is the surest economy. We have now entered on a changeable autumn; diarrhœa is already rife; medical aid is no doubt available for its treatment, but, in the case of infants, that treatment must in a large degree consist of the preventive measures we have advocated.—*British Medical Journal.*

* * *

Divisibility of Perfumes.—The odoriferous molecule of musk must be incomprehensibly small, when we are told

the particles one grain of musk had, in a radius of ninety feet, disengaged in one day. No microscopical power has yet been conceived to enable the human eye to see one of these atoms; yet the organs of smell have the sensitiveness to detect them. We cannot imagine their smallness, as it is stated that the same grain of musk undergoes absolutely no diminution in weight. A single drop of the oil of thyme, ground down with a piece of sugar and a little alcohol, will communicate its odour to twenty-five gallons of water. Haller kept for forty years papers perfumed with one grain of ambergris. After this time the odour was as strong as ever. Bordenave has evaluated a molecule of camphor sensible to the smell to 2,262,584,000th of a grain. Boyle has observed that one drachm of assafœtida exposed to the open air had lost in six days the eighth part of one grain, from which Keill concludes that in one minute it had lost one 69,120th of a grain.

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Why the Italians Sing.—C. H. Von Klein, M.D., gives the following in a paper read before the thirty-ninth annual session of the Ohio State Medical Society, at Dayton, June 5, 1885:—Through the kindness and under the auspices of the late Dr. Bordini, of Rome, the author had made the examination of the throats of thirty-two Italians, thirteen of whom were professional singers. The Italians appear to have natural organs of voice for music. He found the throat very roomy, the tonsils almost level with the fauces, the uvula extending only one-eighth of an inch from the soft palate, the posterior nares very large, the larynx thickly lined with a smooth mucous membrane, the trachea enormous. Another peculiarity was, the author found it very seldom necessary to use a tongue-depressor. They seem to place their tongue down to the mylohyoid muscles, forming it into a concave shape. This accomplishment is necessary for a singer, and can be effected only by long and tedious training.

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Plumbers and the Public.—The court of the plumbers, breathing balmy air amid ancient woodlands, had a kind thought for Londoners gasping for open spaces. Modern sanitary science demands, as the Master intimated, two things—open spaces are one of them, and good plumbing is the other. Sanitary imaginations, projecting themselves into the future, sympathetically shudder at the wrath and contempt with which later generations of Londoners are sure to visit the memory of their ancestors who might have bequeathed them cheap and irrecoverable playgrounds. But London cannot camp out at Highgate, or in the most spacious people's park. The citizen must come home at night, and then the plumbers have him. They may poison him with sewer-gas or distil sewage through a waste-pipe into his cistern. They may drug him through a perforation in his gaselier, and perhaps blow him up. They may place all in order for a thaw and spoil his temper and his carpets with a deluge. They wield a power so terrific and so various that it seems almost treasonable in the body which affects to represent them to be plotting for their conversion into a trade which, as it becomes more efficient, will become less noticed. Good plumbing, like many other good things, is invisible and impalpable. It is bad plumbing which flaunts its presence and forces observance. But virtuous plumbers need not be afraid their merits will ever run the risk of being taken too implicitly for granted from the absence of bad.—*Times.*

PLASTER-OF-PARIS figures may be made to look like alabaster by dipping them in a strong solution of alum-water.

Our Bookshelf

"Reading maketh a full man."—*Bacon.*

Health Resorts at Home and Abroad. By M. CHARTERIS, M.D., Professor of Therapeutics and Materia Medica, Glasgow University. (London: J. & A. Churchill. 1885.)

PROFESSOR CHARTERIS, in the present work, gives a condensed account of "holiday sketches, which, in the form of lectures, were delivered to students attending the Course of Therapeutics in Glasgow University." His book is accompanied by a large map, drawn by Dr. Steinschneider, of Franzensbad, in which the chief health-resorts are distinguished by red markings and by being underlined in the same colour. The first remark we may make with regard to this work is that its title is somewhat misleading. In the first place, Dr. Charteris says very little about health-resorts at all, but writes copiously enough regarding mineral waters and their specific characters and uses; while, in the second place, he passes by without remark most of our home-resorts, and his descriptions of foreign resorts are meagre, numerically and otherwise, when compared with such books as those of Yeo, Tichborne, and James. The whole volume numbers some 156 pages; out of these only 22 are devoted to home-resorts, while the bulk of the work is occupied with notes of foreign places to which invalids may repair. An appendix, highly useful in its way, is given, and includes information regarding "sea-sickness," routes from London, preparations and doses of drugs according to the British and Austro-German Pharmacopœias, &c.

It is true we cannot expect to find information regarding every health-resort in any one volume, but Dr. Charteris's title is, as we have remarked, misleading in the sense that persons may, through a glance at the name of his book, legitimately expect to find more information contained therein than he gives. No mention, for example, is made of the Clyde resorts, to which, considering Dr. Charteris's near proximity, we might have expected copious reference. Nor does he touch of east coast places in England or Scotland. Buxton, Bath, Cheltenham, and other places are duly described, but the information given regarding them is threadbare and well worn in the sense that every guide-book contains knowledge of the kind dispensed by our author. Actual errors of omission and commission, also, are not wanting in Dr. Charteris's pages. Thus Meran, in the Tyrol, is not a resort of high altitude: the alkaline features of Vals waters are not alluded to, while the saline springs are duly noted, and surely it is an error of judgment to set down "Æsculap" and "Apollinaris" among "health-resorts." Royat, in France, goes without mention also.

Apart from these defects, it must be added that there is much in Dr. Charteris' book which will interest and instruct those who are in any way concerned to know details regarding health-resorts. His descriptions, if often brief, are clear and unmistakable, and this alone is a high virtue in a book intended for the understanding of that "patient omnivore" the general reader, as well as for the physician himself.

SCOTT'S MIDLOTHIAN OAT-FLOUR.—Messrs. A. & R. Scott, of Kingston, Glasgow, and Finsbury-square, London, have prepared a singularly pure and nutritious "Oat-flour," which bids fair to take high rank among the food products which are specially adapted for infants and invalids, and for the use of dyspeptics in particular, whose digestion is weak, and whose stomachs refuse to assimilate foods of ordinary kind.—ED. HEALTH.—[ADVT.]

Speaking of Strathpeffer, the well-known Scottish resort, Dr. Charteris gives the following account of the Spa. It "lies at the foot of Ben Wyvis, in Rosshire. The two chief wells are strong sulphur springs. The upper contains eighteen grains of solid ingredients in twenty ounces, the constituents being chiefly sulphates of soda and lime, with three and a quarter cubic inches of sulphuretted hydrogen. The lower has thirteen and a-half grains of the same salt in twenty ounces, but with only one and three-quarter cubic inches of the gas.

"The upper well is the strongest sulphur spa in Britain, and its action is powerfully diuretic (*i.e.*, affecting the kidneys), and rather constipating. The usual quantity taken is three tumblers before breakfast, and as many more in the afternoon. After a short course, the sulphur sensibly and visibly saturates the system, for the cuticle often comes off in scurf, as in the desquamation from scarlet fever, and when the underclothing is shaken over a fire, a blue flame arises, and the odour is unmistakably sulphurous. Chronic cases of sciatica, lumbago, and rheumatism here find great relief. Life at Strathpeffer would, for invalids, be greatly enhanced by some artistic decorations round the spas, and the presence of a lively and cheerful band. As it is, Strathpeffer presents to them simply the grimmer features of austere Scotch country life, the midday gossip on the arrival of the daily coach, and demure questionings as to the nationality and pedigree of fresh visitors." As Dr. Charteris, however, adds in a footnote, "The railway lately opened will doubtless make it livelier."

Franzensbad is noted for its mud baths; and the account of these baths, which excel in power those of Marienbad and Carlsbad, may be quoted. The town stands on a "peat moss," which furnishes the baths in question. "This muddy earth," says the author, "is brought into the court-yard of the large bathing establishment. It is diluted with water from one of the springs, and then steam is passed through it until by proper mixing and stirring it feels like a soft poultice. All undissolved clots are carefully removed. When it is considered sufficiently prepared, a bathing-tub, resting on four wheels, is nearly filled, and moved into the establishment, when it is required for bathing. The temperature at first is high, but it is cooled down until it reaches 80 deg. Fah. Into this black and unsightly conglomeration the bather, undressed, betakes himself, and rests in it for about twenty minutes. A peculiar fresh, not disagreeable, acid smell is detected, and the effect on the skin is soothing and delightful in the extreme. There is at first some slight increase of the respiration, and a kind of panting sensation, which, however, soon wears off, and is succeeded by a dreamy quietness.

"Stepping out of the bath at the expiring of the time mentioned, the appearance presented by the latter is not prepossessing. Here and there, the white skin shines through its dark, dripping covering, but the general aspect is dirty and repulsive, and the plunge into the fresh clean water of a corresponding bath is relished with glee. Here, gradually the peaty covering is removed, and the skin becomes fresh and glowing and sating to the touch.

"A kind of feeling as if you are as clean as water can make you, remains with the bather during the rest of the day, and the enjoyment is heightened by a sensation as if you had been gently ironed and smoothed like a well-laundried table-napkin.

"The mud-bath has an excellent effect in cases of nervous excitement and hyperæsthesia. It is a producer of sleep, and calms restlessness and dispels fidgety sensations."

Considering that upwards of 1,300 invalids now winter at Davos Platz, this resort demands special notice. Dr. Charteris's account is clear and readable, and his remarks on suitable and unsuitable cases for this resort should be studied by all interested in the selection of Davos as a winter residence for consumptives. It might be added that many physicians might profitably study these remarks as well, and save much heartburning on the part of patients sent to Davos, and for whose cases the place is unsuited. Every case of consumption is to be judged as regards its recovery by the two guides—an increase in weight and a fall of temperature. "If," says Dr. Charteris, "we take an ordinary case of phthisis, we find the temperature in the early stage to be say 98 5 F. a.m., 99 deg. F. to 100 deg. F. p.m. If we take a later stage, we find the temperature at the same periods 98·5 F. a.m., 101 deg. F. or 102 deg. F. p.m. Are two patients with such differences of temperature equally eligible for a mountain-residence? Most distinctly and decidedly not. The former is certainly a proper case for the mountain-air, the latter is not; and for him or her a soft, mild atmosphere like Cannes or Pau will be more beneficial."

These are plain words, and the summary of this all-important question of a choice of resorts for consumptives is as clearly given in the following law:—"Let the young man or woman on whom the hereditary taint of phthisis rests, spend, if possible, a month or two at Davos, so that, when the constitution is forming, he or she may inhale a pure air, and may expand the lungs and increase in bodily vigour."

As a final quotation from the work, we may notice the "grape cure" of Meran, in the Tyrol. This "cure" begins in September. The grapes are neither sweet nor sour, but exhibit a combination of these qualities. Early in the morning, at 7.30 or so, the visitors purchase their grapes, three or four pounds being sold for threepence, and wander about eating the fruit. A light breakfast follows. On corpulent subjects the effect is laxative, and four or five weeks of the "grape cure" are said to reduce fatness to a great extent. Consumptives ordered this cure increase in weight. In such cases the fruit is eaten after breakfast, and up till noon. It is also ordered that the grapes be eaten slowly, and that not more than one pound per day should be taken.

The principle of the grape cure depends on the fruit being rich in sugar, as much as 2½ oz. to 4 oz. of sugar exist in 16 oz. of grape-juice. Fat is thus encouraged in its formation, and the wasting of the disease counteracted. In the spring, consumptives at Meran drink goats' whey, which relieves cough and spasm.

Dr. Charteris's book, as may be seen from our extracts, contains much solid information, and to residents in foreign resorts may prove a valuable companion.

Messrs. Cassell's serials, *The Family Physician*, *Household Guide*, *Countries of the World*, and *Popular Gardening*, continue their successful issue. There is no more valuable series of works issued than the foregoing. *The Season* (13, Bedford-street, London, W.C.) is a magazine which, from the beauty of its illustrations, and the large amount of information it conveys regarding ladies' dress and other matters, should become a prime favourite with the fair sex.

M. Fordoz gives a very simple and useful method for detecting lead in the tinning of culinary utensils. The vessel having been carefully cleaned to remove grease, a drop of nitric acid is applied to any part, and a gentle heat is used to dry the spot. A drop of solution of iodide of potassium is applied to the spot, and if lead be present a yellow iodide of lead is formed.

Sanitary Appliances, Etc.

AN ECONOMIC AND HEALTHY DRESS FABRIC.

Our attention has of late been called to a new manufacture in the way of dress-fabric, which, in the interests of our fair readers, deserves special mention at our hands. We allude to the new patent "Velveteen Damassé," which has been examined on our behalf by an expert, and of which a most favourable report has been received. In the first instance, the fabric itself is practically indestructible as regards ordinary wear, and in the second place, as the designs on the Velveteen Damassé are woven into the substance of the cloth these patterns are also permanent, and last as long as the cloth itself. The striking contrast between these indestructible patterns and designs and the fleeting nature of the patterns ordinarily worn—this last a source of great disappointment to wearers of common velveteens—can be readily imagined. Concerning the important question of economy in relation to these fabrics, the cost of the Velveteen Damassé is not greater than what is ordinarily paid for good velveteen itself. The application of heat, wet, and friction failed to remove or destroy the pattern of this cloth. This fact will prove a most powerful argument with most ladies in favour of the new fabric, since the patterns of the common stamped or embossed velvet are apt to appear shabby and worn even when the cloth itself has hardly suffered wear.

The health-aspects of this fabric may be specially alluded to in a notice of this kind; the considerations of economy, durability, and last, though by no means least, the sanitary features of the new invention, being the points which fairly claim attention in the case of Health. For winter wear, the new Damassé is unsurpassed, in respect of being a warm fabric, suitable especially for mantles and for dresses as well. Its properties in the way of heat-retention strike us as being very high, and as admirably fitted to guard the body against the effects of chills and cold. A highly important quality also, from the health point of view, is the lightness of this cloth. Dress-reformers have invariably wrangled over the question of supporting ladies' dresses, forgetting that the primary condition of success in this matter is the weight of the clothes which demand support. A dress of this material, while warm and comfortable in every sense, is not a weighty garment. On the contrary, it presents the minimum of weight with the maximum of warmth. It is, therefore, to be regarded as fulfilling admirably and exactly the conditions required in hygienic clothing. Greater praise than this cannot be bestowed on any dress fabric, and we can, therefore, commend the "Velveteen Damassé" to the attention of our lady readers. We may add, that the material is kept, or can be ordered, from all drapers. The fabric is patented, and the trade-mark and name are stamped on every second yard of the cloth.

Our Letter : Box

"Conference [maketh] a ready man."—*Bacon.*

NOTICES TO CORRESPONDENTS.

All Communications for the Editorial Department (including specimens of Sanitary Appliances, &c.), to be addressed to "The Editor of Health," *74-76, Great Queen-street, London, W.C. Those intended for the Publishing Office to be sent to* "The Publisher," *at the same address.*

LETTERS TO THE EDITOR.

VENTILATING HATS.

Sir,—Miss Ada S. Ballin may lay claim to be a "dress-reformer," but, like certain other members of that class of innovators, she appears to be more apt at theorising than at determining the practical bearings of the questions she raises. Take, for example, her dissertation on men's hats. Miss Ballin, not content with tacitly agreeing with your correspondent, "Aliquis," flies off at a tangent into the matter of hat-linings. Miss Ballin's ignorance of the proper linings for men's hats may be pardoned; her temerity in rushing into print thereupon is less open to excuse. Not being a man, how can she speak authoritatively about men's hats? or has it come to this, that we poor males are so destitute of the ability to discern what is good for us, that it is left to Miss Ballin to settle the ways and works of such old-established firms as Heath, Lincoln & Bennet, Christy, & others, as represented in our head-gear? It is clear Miss Ballin knows nothing whatever about men's hats and men's comforts in head-apparel, otherwise she would not rush so precipitately into a question which men (and hatters) have long ago settled. We are not, let me say to Miss Ballin, in the terrible state of despair regarding our head-gear in which she appears to depict us. Let me also tell her that nothing can exceed in comfort a nice, soft leather lining for a hat. I have a Russian leather lining inside my hat which is the perfection of comfort. Inside another I have a white leather lining, which is equally comfortable.

To place flannel or felt (!) inside a hat as lining would be the height of folly. Every one who has worn a straw hat with its flannel lining in a hot day knows what the "absorbent" qualities of which Miss Ballin speaks mean and imply. The lining in such a case is not only hot and uncomfortable, but gives rise to eruptions and skin irritation such as are unknown in the case of the soft leather; and this latter, it must be remembered, can be easily cleansed with a sponge or towel, whereas the flannel or felt becomes a mass of dampness incapable of being cleaned, and sanitarily objectionable. Whatever rank as a dress-reformer Miss Ballin may have attained, it is clear she cannot pose as an authority on men's hats.—I am, yours, &c., Homo.

QUERIES AND ANSWERS.

GENERAL.

A. L. F.—Shortly: these articles will be commenced in our new volume.

Thomas R.—Your request has been attended to.

E. F. G.—1. Apply to the publishers, please. 2. Yes.

Sofa.—A cure for insects, bugs, &c., is said to be made by mixing two ounces of camphor, four ounces of spirits of turpentine, one ounce of corrosive sublimate (poison), and one pint of alcohol. This mixture is to be applied to the bug-infested places; and to be labelled "Poison."

Woollen.—It is a mistake to wash the garments in hot water at all. Make a lather with soap and hot water, and use this to wash the fabrics in the cold water, or use cold-water soap throughout. Do not let the soap itself come in contact with the garments; simply use the lather. This may suffice to remove your difficulties.

Sandy.—Your best plan is to hand the fabric to a firm of professional dyers and cleaners. Such stains are very difficult to remove from a fabric of that nature.

SANITARY.

Darwen.—The fault is in the trapping, not in the general arrangement of the drainage, which from your sketch appears to be excellently ordered. See to the efficiency of the traps.

T. M.—No apparatus will effect all you desire. Try Twyford's "Unitas" closet.

E. B. G.—In such a case we should certainly have the washhand-basin fittings looked to. No odour such as you describe should for a moment be permitted to enter a room from such a basin. The mere bending of a pipe below is no protection. The basin must be completely disconnected from all drains, and made to discharge separately into a gully or proper trap.

Ellen F.—In about six weeks the child should be well enough to attend school.

Lex.—No; the duty is statutory, and compelled by the preceding section of the Act.

Olga.—We should, in such a case, be contented with a thorough fumigation with sulphurous acid gas, and with a washing of woodwork and re-papering thereafter.

MEDICAL.

Anxious.—The only way in which you can best remove the cause of your symptoms is by going away for a holiday and rest. In this way you will be able to gain a store of reserve-force or health, which may enable you to overcome your present annoyance. In addition, take fifteen drops *Fer Bravais* as a simple tonic thrice daily in water an hour before your meals. You may, of course, be constitutionally nervous; if so, you must regulate your work, so as to have needed rest and recreation.

Lewis St. George.—Press out the "black-heads," and then sponge the parts with Eau de Cologne or toilet vinegar. Your ailment arises from deficient skin action. Take a hot bath occasionally.

A. M. Whittard.—It is most probable that you suffer from a form of neuralgia than from rheumatism; but, having regard to your age and to the circumstances of the case, we think your best course would be to consult a physician accustomed to treat such ailments. He alone, after examination, could determine the ad-

visability of electrical applications. If desired, we can send you address of a specialist on receipt of stamped, addressed envelope.

Ambassador.—Shave completely for a month or two, then rub into the skin, as the hair grows, Rowland's Macassar Oil. If not bettered, write again.

Moel-gest.—See and follow advice given to "John Miller," in Health No. 124, as regards the diet, &c., for removal of constipation. Take the Cascara Cordial there recommended, and, after it has toned your digestive system, take the foods (Oat Flours, &c.) ordered by way of correction by diet of your ailment. Give up tea and coffee, try a cold sponge-bath each morning, and take plenty of open-air exercise.

Played Out.—Alternate the tonic you are now using, week about, with Mariani's Wine of Coca (see advertisement in our pages), which has a high reputation in cases like yours. Please bear in mind the rule that, in such cases as yours, nervous anxiety and worry defeat the object in view. Simply take the tonic and cold sponging each morning, and keep your mind from dwelling on your ailments. Again, remember that while such failures are often only temporary, middle age brings with it decrease of power, and your only course is to adapt yourself to your years. As for the other remedies you name, if you value your health, have nothing to do with them. You cannot reasonably flog a tired horse: you may only rest and recuperate him.

Germania.—1. Avoid suppers and fluids late at night; take plenty of open-air exercise; and for a time take twenty grains bromide of potash in water, at bedtime. If you have mental worry your restlessness at night may thereby be accounted for. 2. The hair-preparation you name may be tried.

Dyspepsia.—Rest after your meals is absolutely necessary for health; avoid vegetables for a time; and take for the constipation (which is at the root of your ailments) twenty drops Cascara Cordial (Parke, Davis, & Co.'s) in water, once or twice daily, as may be found necessary, an hour before your food. When this medicine has caused your digestive action to become of natural kind avoid tea and coffee, and take stewed fruits, whole-meal bread, and for breakfast Grant's Scotch Oat Flour, or Scott's Midlothian Oat Flour. Both are excellent foods, and prevent constipation.

Hammer.—1. What you name is perfectly possible. The other side's contention would be abundantly supported by medical evidence, and there is no reason (as far as physiological science is concerned) why you should escape liability. It was not necessary for the result you name to have happened, that the operation in full should have been completed. 2. The symptoms named are quite consistent with the views and contentions of the opposite side. Our advice to you is to accept the responsibility and to let the matter end thus.

Tom.—Possibly there is nothing much wrong. Try first of all the use of a little plain vaseline or cold cream; if this should not succeed, let your friend consult a thoroughly respectable surgeon. We can send you address of such if desired, on receipt of stamped, addressed envelope.

Alfred James.—You are perfectly well, and need no medical advice whatever. What you name is perfectly common in, and natural to, healthy persons. Only quacks will tell you differently. Simply continue your cold bath, avoid constipation, and don't take fluids or suppers late at night. Steer clear of quacks above all things. The habit you name has left no effects in your case, and if you feel any such symptoms as quacks describe, they are only due to your imagination.

W. R. Dewar.—The apparatus in question is worthless. Don't waste your money on any such "appliance." You are probably only nervous, and have been excited by perusing quack literature. We advise you to attend to your general health simply; sleep on a hard mattress in a well-ventilated room; sponge with cold water each morning; avoid suppers and fluids late at night; food to be simple; no alcohol. Avoid constipation above all else, and if this condition exists, take twenty drops Cascara Cordial (Parke, Davis, & Co.'s) in water once daily, an hour before breakfast, for a few days, and thereafter eat fruits, whole meal bread, &c. Take also, for a short time, a teaspoonful of Fellows' Syrup of the Hypophosphites in a wineglass of water, thrice daily, an hour before your meals, as a tonic.

P. J. S. M.—Try the effect of bathing the parts with hot water in which Tidman's Sea Salt has been dissolved, and rub in thereafter warm oil or warm vaseline. Internally, take the Victoria Water, as advertised in Health, as a constitutional corrective. If not bettered, write again.

Weak.—Rest after your meals is the first consideration in your case; let your diet be light, and avoid vegetables for a time. Take Morson's Pepsine with your food, and try strong soups made with Brand's, Mason's, or "Lion" Beef Essence," &c., white boiled fish, stale bread, milk puddings, &c. Probably a glass of good claret with your food may aid you greatly. Glad to be of any further service.

Excelsior.—Try a dose of Lamplough's Pyretic Saline in the morning, and avoid vegetables for a time. You must rest after your meals, and avoid your run back to business if you would be healthy.

T. D. D.—The medicine you name should not be taken continuously—no drug whatever should—because it ultimately comes to replace natural means of producing the desired effect. We advise you to try the medicine on alternate nights only, then to decrease the frequency and dose still further. Try plenty of fresh air through the day, walking, &c. A change for a time to the sea has a wonderful effect in such cases, presuming there is no exact cause to be discovered for the ailment.

W. T. H.—1. In such a case adopt dry treatment. Blow carefully into the ear, each morning, a little very finely-powdered boracic acid—don't put any cotton wool into the ear—and internally take the Fellows' Syrup as ordered to "W. R. Dewar" in the present number of Health. Report result of this treatment to us. 2. If not bettered, we can send you address of specialist in ear diseases, on receipt of stamped, addressed envelope. Avoid colds and chills, of course. The tonic above named will brace your system. 3. Loisette's system is the best we know, and has acted admirably in many cases known personally to us.

Mary Lizzie.—Give the child half a teaspoonful of Scott's Pure Cod-Oil Emulsion with Hypophosphites (advertised in Health) twice or thrice daily after his food. You should change your residence if it is too exposed. In your town there are surely warm situations to be had. Try also sponging the child's chest with cold or tepid water, in which Tidman's Sea Salt has been dissolved, each morning, and use brisk friction with a towel to the chest thereafter.

Ebor.—Try bathing the parts with hot water in which Tidman's Sea Salt has been dissolved, and rub warm oil (or Vaseline) into the parts at night. Internally you might try the effect of the Fellows' Syrup above recommended to "W. R. Dewar." If, as we suspect, you suffer from want of tone, these measures will brace you up. If not bettered, write again.

Grateful.—1. Yes; keep the hair short for a time—say two or three months—use a soft brush only, and continue the oil. 2. Certainly no occasion for any uneasiness; a perfectly natural consequence of health.

Charles Petty.—In such a case we would advise you to cause the patient to see a physician at intervals. Epilepsy is too serious a disease to be allowed to go on unchecked, and a physician would be able from time to time to watch the progress of the case, and to advise regarding treatment. All causes which tend to lower the general health, as well as mental excitement, &c., will predispose the patient to a frequent recurrence of the fits. Bromide of potash is a well-known remedy, and no harm can accrue from its use in the case you name, as the doses given are by no means large. Continue with this remedy, but consult a physician by all means.

Peckham.—You must rest for at least an hour after your meals if you would recover your health. All your symptoms point to indigestion, arising from want of care in diet, and especially in the above respect. Let your food for a time consist of milk, light puddings, white boiled fish, and take Scott's Midlothian Oat Flour, or Grant's Scotch Oat Flour for breakfast and supper. Stewed fruits occasionally may be taken; eat stale bread only. Take Morson's Pepsine with your food, and drink Victoria Water as a beverage to counteract acidity.

Maud.—Superfluous hairs can only be effectually destroyed by electricity. If desired, on receipt of stamped, addressed envelope, we can send address of a specialist who will perform this operation.

H. J. W.—1. It is possible your symptoms are due to the extreme acidity of the secretions. As a first suggestion, we advise you to drink freely of the Victoria Water, as ordered to "Peckham" above, and to give up all alcohol. If this does not suffice for your relief, write again. For the rest, try the effect of taking a teaspoonful of the Fellows' Syrup as ordered to "W. R. Dewar" in the present number of Health, twice or thrice daily, after your meals, in a wineglass of water. Your system is in a low state, and your occupation may be much against you. Take plenty of open-air exercise. 2. No; not too frequent. 3. The cod oil is a good brand.

O. O.—Our advice to you is simply to read and follow out carefully the treatment recommended to "W. R. Dewar" in the present number of Health. This advice may cure your symptoms. You must also be careful to attend to the golden rule of moderation in all things.

Spes in Rerum.—You may be hereditarily nervous, in which case we can only give you the general advice to look well to your general health, and to avoid all lowering causes. We would add that such nervous feelings "grow by what they feed upon," and that you should accustom yourself simply to ignore them, if pos-

sible. This is your difficulty; but it is not, to a person with common sense, an insurmountable one.

Muriel.—The soles named will doubtless do good by affording warmth. The patient should sit and rest with the feet elevated, and should wear roomy shoes, not boots. The foot of his bed should also be slightly elevated so as to favour the return of the blood in the veins of the legs.

Wildbird.—See and follow advice given to "W. R. Dewar" in the present number of Health. You need not be alarmed regarding yourself, and you will be more than foolish if you think your past has anything to do with your present state, or that your state now is in any sense serious. By attention to directions given you will get quite well.

O. C. S.—1. The swellings are enlarged glands. Go to the seaside for a prolonged holiday, and take a dessertspoonful of cod-liver oil to which fifteen drops *Fer Bravais* is added, thrice daily after your meals for a time. Paint the swellings daily with ordinary tincture of iodine, until the skin becomes tender, when the painting may be stopped for a time. The swellings indicate constitutional weakness, and you must attend very carefully to your general health. 2. Apply a little Pond's Extract (one to three of tepid water) as a lotion externally to the parts named.

G. P.—You surely mistake the meaning of the term "cautery," if you suppose surgeons would apply any such extreme treatment in the case you name. Your diet should be light, simple, and non-stimulating. Take milk, milk puddings, stewed fruits, white boiled fish, stale bread, cocoa, little meat, and avoid tea and coffee, salt meat, pastry, and like foods.

Selymus.—See and follow advice to "W. R. Dewar" in the present number of Health. Please to observe that what you complain of is not necessarily (and unless over-frequent) a sign of disease, but on the contrary, one of health. Look to your food, which should be light and simple (see advice to "G. P." above), and rest after your meals.

Nelson.—You are in a tremendous hurry to be cured. Your common sense should teach you that time is required in such cases, and a month of treatment can only show what you exhibit, namely, an improvement on your previous state. Persevere with the advice given you, and take the tonic on alternate days only. The cold sponging each morning will do you great good in time, add Tidman's Sea Salt to the water. You will never recover your tone so long as you are needlessly excited and nervous over your condition. We have already told you there is no need for fear or anxiety.

Janus.—You are over-nervous; what you name is not a sign of weakness at all, and only quacks will tell you so. Look to your food simply, rest after your meals, avoid tea and coffee, and substitute Scott's Midlothian Oat Flour, or Grant's Scotch Oat Flour, for breakfast and supper. Take a little of Morson's Pepsine with your food, and begin your treatment by trying twenty drops of Cascara Cordial (Parke, Davis, & Co.'s) in water, each morning, an hour before breakfast, as a corrective to your digestion, &c. Write again, if not bettered.

A Working Man.—1. See advice regarding food and rest after meals given to "G. P." above. Avoid late suppers. The Cascara Cordial ordered to "Janus" above should be taken if constipation or liver symptoms exist. 2. Sponge the parts with cold water, to which Tidman's Sea Salt has been added, morning and night, and wear a suspensory bandage.

W. H. S. Beveridge.—We cannot undertake to reply by letter to all the queries you send. You have recently been twice answered in this way. Mr. Young, surgical-instrument maker, Forrest-road, Edinburgh, will supply your wants.

A. J. P.—[Your letter, intended for the Editor, was addressed to the "Publisher" of Health. Will you please note directions to correspondents given legibly each week at head of "Letter-Box" column? The publisher does not edit a journal.] Have your ears syringed carefully with soap and tepid water to clear them of wax; drop a little glycerine in the ear at night before syringing, so as to soften the wax. If this does not suffice to cure you, take twenty grains Bromide of Potash in water at bedtime, and note effect on your ailment.

Vance Volka.—[Please note remarks regarding direction of letters given to "A. J. P." above.] 1. The colour of the hair

[*Continued on page* 368.

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may be lightened by washing with a weak solution of soda and tepid water; but all such processes injure the hair. 2. Take *Fer Bravais* as ordered to "Anxious" in the present number of Health, and plenty of out-door exercise. 3. Rest after your meals, and eat fats, starches, and sugars in plenty. If you are in robust health, why should you wish to "get stouter"? Beware of experimenting with your health.

Mac (Glasgow).—We do not see why you should be troubled at all. There is really nothing the matter with you, and if you are wise you will not allow your thoughts for a moment to go back to the past. See and follow the general directions given to "W. R. Dewar" in the present number of Health.

X. Y. Z. (Edinburgh)—Sponge with cold water and use brisk friction thereafter with a hard towel. Do not overdo exercise. Food to be light but nourishing, and take for a time Mariani's Wine of Coca as advertised in our pages. It is an excellent stimulant. Let us hear how this advice suits you. Of course, in a case like yours, you will know that the mind has an immense influence over such functions.

Rem.—Take a hot bath occasionally, and fifteen drops of *Fer Bravais* in water after your meals. Give Samphire Soap (see advertisement as to obtaining a specimen cake free from Messrs. Field, in last week's Health) a trial for your skin, using it for the hot baths and for ordinary washing as well. No salt meat or pastry to be taken. Give up tea, and substitute Scott's Midlothian Oat Flour or Grant's Scotch Oat Flour for breakfast and supper, and by way of alleviating constipation. Try, also, applying a lotion consisting of bicarbonate of soda one drachm, and glycerine an ounce and a-half, to the parts.

Spero.—No need for you to be disconcerted. Use physical means as well as mental for your recovery. See and follow advice to "W. R. Dewar" in the present number of Health, and you will get quite well.

Alpha.—Wash the hair with Field's Samphire Soap (see remarks regarding this soap to "Rem" above) and tepid water, twice weekly; use a soft brush, and rub in Rowland's Macassar Oil to the roots of the hair each morning.

F. W. L.—See and follow advice given to "Rem" above, regarding baths and the use of Samphire Soap. Attend, also, to the hints as to diet given above. The constipation from which you suffer is at the root of your troubles. Avoid this, as directed above, by the use of Oat Flour, or by taking (if necessary) the Cascara Cordial ordered to "Dyspepsia" in the present number of Health.

Calmar.—Are you aware that such cases are of extreme rarity, and that many physicians deny their existence altogether? Quacks, of course, make much of such cases, but the secretion is quite harmless and different from that supposed, and arises from constipation most frequently. See and follow advice given to "W. R. Dewar" in the present number of Health, and, if not cured, write again.

J. Fuller.—The firm is a quack one, as any one may see from the pamphlet published and circulated by these worthies. Certainly, you may consult them if you wish to lose money and health. Why not go to a respectable medical man? Avoid persons, qualified or not, who advertise.

Abacus.—The idea is simply an "old wife's tale." There is neither rhyme nor reason in it, we assure you. So keep your mind perfectly easy on that score.

T. Templeton.—Too bracing for you. Try a warmer resort. Devonshire (*e.g.*, Torquay), would suit you.

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